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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,110	04/20/2004	Victor M. Casella	311.30C	6482
27019	7590	06/04/2007		
THE CLOROX COMPANY P.O. BOX 24305 OAKLAND, CA 94623-1305			EXAMINER KUMAR, PREETI	
			ART UNIT 1751	PAPER NUMBER
			MAIL DATE 06/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/829,110	CASELLA ET AL.	
	Examiner	Art Unit	
	Preeti Kumar	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 58-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/20/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Non-Final Rejection

1. Applicant's election with traverse of Group III, claims 58-71 in the reply filed on 4/10/2007 is acknowledged. The traversal is on the ground(s) that the claims emerge from a common inventive concept; a method for depositing a hydrophobic agent, a method of increasing oil repellency by depositing a hydrophobic agent and a fluoropolymer and a kit comprising a composition, a dispensing device and instructions and thus submit that the search for any of Groups I-III is not undue burden. This is not found persuasive because the groups comprise different inventions encompassing different enzyme cocktail detergents comprising different enzymes which have different modes of operations and different effects on different types of stains. To search and examine all these differences is undue burden on the examiner).

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-57 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/10/2007.

3. Claims 58-71 are pending.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 4/20/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 58-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haq et al. (US 6,075,003) in light of Dupont MSDS (DU00420) and further in view of Frankenbach et al. (US 6,491,840).

Haq et al. teach a fabric laundry treatment composition comprising: a) a fluorocarbon polymer or a fluorocarbon copolymer or mixtures thereof; b) a deposition

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aid comprising a cationic softening compound or a polymeric delivery aid or mixtures thereof. See abstract.

Haq teaches that the fluorocarbon polymer is a perfluoroalkyl acrylic copolymer, a perfluoroalkyl methacrylic copolymer, a fluorinated substituted urethane or a fluorinated acrylic copolymer. It is further preferred if the fluorocarbon polymer is present as a cationic emulsion. An example of a particularly preferred polymer present as a cationic emulsion is Zonyl 6991 (trademark ex Du Pont)an acrylate polymer. It is advantageous if the cationic emulsion of fluoropolymer further comprises a short chain carboxylic acid. See col.2. Haq et al. illustrate the utility of specifically 18% active fluoropolymer in col.6, ln.63. Regarding the hydrophobic agent, Haq et al. teach that it is preferable if the cationic emulsion of fluoropolymer further comprises a paraffin wax. See col.2,ln.38. Furthermore, ZONYL 6991 Fabric Protector is known in the art to comprise 5-10% paraffin wax. See the Dupont MSDS for ZONYL 6991 indicating the state of the art.

Regarding the cationic zeta potential modifier, Haq et al. teach that it is advantageous for environmental reasons to use quaternary ammonium material that is biologically degradable. Specifically Haq et al. teach suitable deposition aids include cationic fabric softening compounds and polymeric delivery aids that are able to attach themselves to the fluorocarbon soil release agent and cause enhanced delivery to the fabric. Suitable cationic fabric softening compounds are water insoluble quaternary ammonium material. A preferred cationic softener is distearyl dimethyl ammonium chloride. It is preferred if the long chain alkyl or alkenyl groups of the fabric softening

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compound are predominantly linear. Di(tallowyloxyethyl)dimethyl ammonium chloride, available from Hoechst, is especially preferred. A second preferred type of quaternary ammonium material include 1,2 bis[hardened tallowoyloxy]-3-trimethylammonium propane chloride. Another form of preferred polymeric delivery aids are cationic polymers, for example cationic starch derivatives, cationic cellulose derivatives, guar gums, quaternized protein derivatives, homo- and co-polymers of dimethyldiallylammonium chloride, and homo- and co-polymers of quaternized dimethylaminoethyl methacrylate. Please see col.3-4. Regarding the claimed the melting point or glass transition temperature or zeta potential as recited by the instant claims, Haq et al. teach a composition for fabric treatment comprising a fluorocarbon, hydrophobic agent, and zeta potential modifier comprising a cationic surfactant encompassed by the material limitations of the instant claims which would be expected to have the same properties as recited by the instant claims.

Regarding various additives, Haq et al. teach The composition can also contain one or more optional ingredients, selected from non-aqueous solvents, pH buffering agents, perfumes, perfume carriers, fluorescers, colorants, hydrotropes, antifoaming agents, antiredeposition agents, polymeric or other thickeners, enzymes, optical brightening agents, opacifiers, anti-shrinking agents, anti-wrinkle agents, anti-spotting agents, germicides, fungicides, anti-oxidants, anti-corrosion agents, drape imparting agents, antistatic agents and ironing aids. Please see col.4, ln.34-44.

Haq et al. teach a fabric laundry treatment composition comprising:

a) a fluorocarbon polymer or a fluorocarbon copolymer or mixtures thereof;

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b) a deposition aid comprising a cationic softening compound or a polymeric delivery aid or mixtures thereof. The examples in col.5-8 illustrate the utility of the cationic zeta potential modifier and a fluoropolymer and a paraffin wax hydrophobic agent.

Haq et al. teach that the fabric laundry treatment composition is dispensed during the domestic rinsing of laundry. See col.5,ln.26. Also Haq et al. teach that the laundry composition may be in any form, preferably is a liquid. See col.4,ln.45.

Haq et al. do not specifically teach the claimed kit comprising instructions for treating fabrics as recited by the instant claim 58.

It would have been obvious to one of ordinary skill in the art to arrive at the claimed kit comprising a composition, a dispensing device and instructions, as recited by the instant claims with a reasonable expectation of success and similar results, because Haq et al. teach a fabric laundry treatment composition comprising the cationic zeta potential modifier and a fluoropolymer and a paraffin wax hydrophobic agent, which composition is dispensed during the domestic rinsing of laundry with subsequent curing/drying and ironing.

Also, Haq et al. do not specifically teach the claimed dispensing device selected from the group consisting of a spray bottle, a dosing container, a water soluble or water insoluble sachet, a water soluble or water insoluble package, a spray or aerosol producing device, an absorbent matrix, a motion-powered, heat-powered, battery-powered or mechanically-powered dispensing device, an ironing device with liquid reservoir, any one of which effectively dispenses said treatment composition onto said fabric during tumble drying or ironing as recited by the instant claims.

Frankenbach et al. teach improved spray dispensers include a clothes dryer or mechanical devices designed to spray fabric care compositions on fabrics or clothes. See abstract and col.4,ln.65-67.

It would have been obvious to one of ordinary skill in the art to arrive at the claimed dispenser to effectively dispense the claimed treatment composition onto said fabric during tumble drying or ironing as recited by the instant claims, with a reasonable expectation of success, because the teachings of Haq et al. teach the claimed fabric laundry treatment composition comprising the cationic zeta potential modifier and a fluoropolymer and a paraffin wax hydrophobic agent dispensed as a liquid and Frankenbach et al. teach improved spray dispensers include a clothes dryer or mechanical devices designed to spray fabric care compositions on fabrics or clothes. One of ordinary skill in the art would have been motivated to combine the teachings of Haq et al. with that of Frankenbach et al. since both references teach the analogous art of treating fabric with fluoropolymer laundry compositions.

9. Claims 58-71 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as unpatentable over Frankenbach et al. (US 6,491,840).

Frankenbach et al. teach fluoropolymer compositions having low viscosity to improve spray dispensing. See abstract.

Regarding the composition, Frankenbach et al. teach a fluoropolymer in col.47,ln.15-57. Frankenbach et al. teach various additives and a zeta potential modifier to formulate an effective wrinkle control agent, selected from the group consisting of: (a)

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adjunct polymers (b) fabric care polysaccharides, (c) lithium salts (d) synthetic solid particles, (e) quaternary ammonium compounds, (f) vegetable oils and vegetable oil derivatives (g) mixtures thereof, and can be utilized in the low-viscosity polymer compositions. See col.20,ln.30-37 and col.32-38. Frankenbach et al. teach that the composition further comprises a supplemental surface tension control agent selected from the group consisting of nonionic surfactant, ionic surfactant, zwitterionic surfactant, fluorine-based surfactant, and mixtures thereof. See claim 19.

Regarding the dispensing device, Frankenbach et al. teach a clothes dryer or mechanical devices designed to spray fabric care compositions on fabrics or clothes. See col.4,ln.7-8. Distribution in the dryer can be accomplished by spraying or misting clothes using a variety of spraying or misting equipment, including, but not limited to, all types of sprayers disclosed hereinbefore, as well as other mechanical devices, e.g. paint sprayers, or any dispensing device that may be mounted in a dryer by a user or incorporated by the manufacturer of the dryer. See col.86, ln.35-45 and col.85,ln.47 for a teaching of hand spraying. And col.89-91 for a teaching of dispensing devices encompassed by the material limitations of the instant claims.

Accordingly the teachings of Frankenbach et al. anticipate the material limitations of the instant claims.

Alternatively, if the teaching of Frankenbach et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious, to one of ordinary skill to arrive at the claimed kit comprising the composition and dispensing device and instructions because the teachings of Frankenbach et al.

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illustrate an analogous composition, spray dispensing device for utility in the analogous art of spraying a fluoropolymeric composition onto a fabric.

10. Claims 58-71 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kaaret et al. (US 2003/0192130).

Kaaret et al. teach a fabric treatment composition that includes at least one zeta potential modifier and a hydrophobic agent with a melting point or glass transition temperature below 100.degree. C. that imparts fabric protection benefits, including improved stain resistance, oil repellency, water repellency, softness, wrinkle and damage resistance, and better handfeel to treated fabrics. Particularly preferred compositions include at least one zeta potential modifier in an amount sufficient to adjust the zeta potential of the composition to be positive and greater than zero millivolts. Particularly preferred compositions also include a fluoropolymer. The composition can be used as a pretreatment prior to washing, through soaking or direct spray application, or added to the wash or rinse cycle of an automatic washing machine, or used prior to or during the drying cycle of an automatic drying machine or refresher machine, or used prior to or in conjunction with an ironing device. The fabric treatment is complete when the fabric is cured by drying and/or heating. See abstract.

Kaaret et al. teach that the fluoropolymer composition is dispensed using a spray dispenser known in the art, trigger-type, pump-type, electrostatic spray device, non-aerosol self-pressurized, and aerosol-type spray devices. See [0146]. Also Kaaret et al. teach sachet dispensers [0151-0153]. Kaaret et al. teach a dispensing during a spin

cycle of an automatic clothes washer can cause a dispenser valve to become unseated so that additive from the dispenser may spill out of the dispenser and mix with rinse water that is added to the washer after the spin cycle. The dispenser can be normally inserted into the washer before the wash cycle begins. It should remain closed during the agitation of the wash cycle, yet reliably open during the first spin cycle at the conclusion of the wash cycle in order to deliver the composition of the present invention at a point in time at which it will be most effective. See [0150].

Accordingly the teachings of Kaaret et al. anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Kaaret et al. are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at the claimed kit for treating a fabric because Kaaret et al. teach an analogous fluoropolymer composition and an analogous dispenser for said composition for the analogous utility of applying to fabrics with the subsequent step of curing. It is noted that although the reference does not specifically teach the claimed instructions however printed matter does not distinguish the claimed kit from the otherwise identical prior art. See MPEP 2112.02.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose

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telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Preeti Kumar *PK*
Examiner
Art Unit 1751

PK

Douglas McGinty
DOUGLAS MCGINTY
SUPERVISORY PATENT EXAMINER

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